

ABSTRACT OF THE DISCLOSURE

A film forming and film modifying method utilizing a film forming apparatus which has an alcohol supply unit to form a metal oxide film on a semiconductor wafer in a vacuum atmosphere in which a vaporized metal oxide film material and a vaporized alcohol exist. The film modifying method irradiates a UV ray on ozone to generate active oxygen atoms, thus modifying the metal oxide film by exposing the metal oxide film to the active oxygen atoms in a vacuum atmosphere.